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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,745	09/22/2003	Hiroyuki Matsushima	243019US2	6827

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EXAMINER

NAUROT TON, JOAN

ART UNIT	PAPER NUMBER
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2154

NOTIFICATION DATE	DELIVERY MODE
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11/29/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/665,745	MATSUSHIMA, HIROYUKI	
	Examiner	Art Unit	
	Joan B. Naurot Ton	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters; prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-21, 27-42, 49-63, 69-84 and 91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-21, 27-42, 49-63, 69-84 and 91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/665,745.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This final rejection is in response to amendments filed on 8/14/2007 regarding Application number 10/665745.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 82 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 82, the phrase, "client third storage means for storing data indicating a status of each of the operation requests transmitted and received between the communication server and the client" is recited redundantly on pages 54 and 55 for the same claim.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

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to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner

in which the invention was made.

2. Claims 9, 10, 17, 18, 27, 28, 32, 33, 49, 50, 69, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US Patent number 6182220, dated January 30, 2001), hereinafter referred to as Chen in view of Matelan, hereinafter referred to as Matelan (US patent 4870784)

Regarding claims 9, 17, and 27:

Chen discloses a communication apparatus that is adapted to communicate with another communication apparatus as a communication counterpart the medium storing programs, and communication system, said communication apparatus comprising ("A method and system is provided for communicating...from a client to a server" abstract, lines 1-2 and "computer usable medium" Claim 10, line 1, and "a computer useable medium having computer readable program code" Claim 10 lines 2-3.): transmitting means (a client, abstract, inherently has transmitting means) for collectively transmitting to the communication counterpart a first operation request to be transmitted to the communication counterpart and a second operation response to a second operation request from the communication counterpart, which first operation request and second operation response are combined in one batch ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response..." Column 3, lines 8-11 of Chen. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses

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that his system, method and medium can combine a first operation request and a second operation response); receiving means (a server inherently has receiving means) for collectively receiving from the communication counterpart a first operation response to the first operation request transmitted to the communication counterpart and the second operation request from the communication counterpart, which first operation response and second operation request are combined in one batch (Chen discloses "receiving from said server an invitation to engage in new environment negotiations" Claim 6, lines 4 and 5, and "receiving from said server a request for a user variable name..." Claim 7, lines 8-9, and Chen discloses a "request that client 110 send the terminal type" as well as the "client 110 and server 100 enter into negotiations for the remaining set of required options..." Column 2, lines 63-67 and Column 3, line 1, and since Chen discloses that a request and a response can be combined together as well as multiple negotiations, he discloses a first operation response and second operation request.); and means for executing an operation according to the second operation request from the communication counterpart ("a computer useable medium having computer readable program code means" Claim 10 lines 2-3, and Chen discloses "step 134 in which server 100 issues the SB Terminal Type send command which is a request, and in Figure 2 it is the second request), and generating the second operation response to said second operation request as an execution result of said operation (and "To this, in step 136, client 110 responds with the terminal type" which is the second response. Also since Chen discloses that he can bundle requests with responses, and because Chen discloses multiple negotiations between the client and the server, Chen

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discloses a second operation request and a second operation response), and requests transmitted and received between the communication apparatus and the communication counterpart. (Chen discloses client/server negotiations in the abstract.) Chen discloses all the limitations as disclosed above except for a memory configured to store data indicating a status of each of the operation requests.

Matelan discloses a memory configured to store data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claim 10, 18, and 28:

Chen discloses the communication apparatus, system, and medium, wherein: the first operation request and the second operation request each correspond to a function call; and the first operation response and the second operation response each correspond to an execution result of a function called by the function call ("Also it is

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permissible and common practice to bundle more than one response or request, or combine a request with a response..." Column 3, lines 8-11. It is inherent that these operations correspond to a function call and the execution result of a function call).

Regarding claims 32 and 49:

Chen discloses the medium storing programs for controlling a computer and communication client that is adapted to transmit a communication request to a communication server ("A method and system is provided for communicating...from a client to a server" abstract, lines 1-2 and "computer usable medium" Claim 10, line 1, and "a computer useable medium having computer readable program code" Claim 10 lines 2-3.), and receive a communication response to said communication request from the communication server, wherein the communication request describes a client request corresponding to a client operation request to the communication server, and the communication response describes a client operation response to the client request (Chen discloses "receiving from said server an invitation to engage in new environment negotiations" Claim 6, lines 4 and 5, and "receiving from said server a request for a user variable name..." Claim 7, lines 8-9, and Chen discloses a "request that client 110 send the terminal type" as well as the "client 110 and server 100 enter into negotiations for the remaining set of required options..." Column 2, lines 63-67 and Column 3, line 1. Since Chen discloses negotiations between client and server, he discloses various requests and responses between client and server) said communication client comprising: transmitting means (a client inherently has transmitting means, and so does a server) for collectively transmitting to the communication server the client request and

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a server operation response to a server request corresponding to a server operation request from the communication server that are described together in the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11, and Chen discloses that these are communications between a client and a server, abstract, lines 1-2); receiving means (a client inherently has receiving means and so does a server) for collectively receiving from the communication server the client operation response to the client request transmitted to the communication server and the server request that are described together in the communication response to the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11, and Chen discloses that these are communications between a client and a server, abstract, lines 1-2, and "the client 110 and the server 100 enter into negotiations" Column 2 of the specification, lines 66-67.); and means for executing (Chen discloses a "programmed general purpose computer", which inherently has executing means, Column 4, last two lines), an operation according to the server request and generating the server operation response to the server request as an execution result of said operation (Chen's client and server generate and execute combining "a request with a response..." Column 3, lines 8-11.) and requests transmitted and received between the communication apparatus and the communication counterpart. (Chen discloses client/server negotiations in the abstract.) Chen discloses all the limitations as

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disclosed above except for a memory configured to store data indicating a status of each of the operation requests.

Matelan discloses a memory configured to store data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claim 33 and 50:

Chen discloses the communication client and medium, wherein: the client operation request and the server operation request each correspond to a function call; and the client operation response and the client operation response each correspond to an execution result of a function called by the function call. ("Also it is permissible and common practice to bundle more than one response or request, or combine a request with a response..." Column 3, lines 8-11. Chen also discloses "a computer useable medium having computer readable program code means" Claim 10 lines 2-3. It is

inherent that these operations correspond to a function call and the execution result of a function call).

Regarding Claim 69:

Chen discloses a medium storing programs for controlling a computer to function as a communication server that is adapted to receive a communication request from a communication client (Chen discloses "a computer useable medium having computer readable program code" Claim 10 lines 2-3 and Chen discloses both a client and a server in his abstract), and transmit a communication response to said communication request to the communication client (a server's medium storing programs inherently aids in transmitting to a client), wherein the communication request describes a client request corresponding to an operation request from the communication client (Chen's client and server perform the operation requests of building and exchanging encrypted passwords, abstract and title), and the communication response describes an operation response to the client request (Chen discloses that his client and server media perform the operation requests and responses of building and exchanging encrypted passwords, abstract and title), said medium containing programs for the computer to function as: receiving means (Chen's client and server media inherently aid in receiving means) for collectively receiving from the communication client the client request and an operation response to a server request corresponding to an operation request transmitted to the communication client that are described together in the communication request (Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11);

transmitting means (a server and a client inherently have transmitting means) for collectively transmitting to the communication client the operation response to the client request received from the communication client and the server request that are described together in the communication response to the communication request (Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11, and since Chen discloses "negotiations" between the client and the server, abstract, entire paragraph, Chen discloses that that the client request and response are received); and means for executing an operation (Chen discloses a computer in Column 4, line 67, which inherently has executing means) according to the client request and generating the operation response to the client request as an execution result of said operation (Chen discloses a computer in Column 4, line 67, which inherently has executing means), and requests transmitted and received between the communication server and the client. (Chen discloses client/server negotiations in the abstract.) Chen discloses all the limitations as disclosed above except for a memory configured to store data indicating a status of each of the operation requests.

Matelan discloses a memory configured to store data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan

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who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding Claim 70:

Chen discloses the medium storing the programs as claimed in claim 69, wherein: the operation request corresponds to a function call; and the operation response corresponds to an execution result of a function called by the function call. (It is inherent that the request and response describe an execution result of a function call)

3. Claims 55, 56, 74, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Komarla et al, hereinafter referred to as Komarla (US patent 7207039) and Matelan.

Regarding claim 55:

Chen discloses a communication server that is adapted to receive a communication request from a communication client ("A method and system is provided for communicating...from a client to a server" abstract, lines 1-2), and transmit a communication response to said communication request to the communication client (Chen discloses "negotiations" between a client and a server, Column 3, line 13),

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wherein the communication request describes a client request corresponding to an operation request from the communication client (Chen discloses the his requests and responses correspond to the operations of building and exchanging encrypted passwords, abstract, entire paragraph, and title), and the communication response describes an operation response to the client request (Chen discloses the his requests and responses correspond to the operations of building and exchanging encrypted passwords, abstract, entire paragraph, and title), said communication server comprising: receiving means (a server as well as a client inherently has receiving means) for collectively receiving from the communication client the client request and an operation response to a server request corresponding to an operation request transmitted to the communication client that are described together in the communication request (Chen discloses the his requests and responses correspond to the operations of building and exchanging encrypted passwords, abstract, entire paragraph, and title, and Chen discloses that "it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11.); transmitting means (a server as well as a client inherently has transmitting means) for collectively transmitting to the communication client the operation response to the client request received from the communication client and the server request that are described together in the communication response to the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, and Chen

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discloses multiple negotiations in his Figures 2 and 3, and notes that the implementation will look different when the request and response are combined together, Column 10 of the specification, lines 10-11.); and means for executing (Chen discloses a computer, in Column 4, line 67, which inherently has executing means) an operation according to the client request and generating the operation response to the client request as an execution result of said operation (Chen discloses multiple negotiations between the client and the server, Column 3, line 13, which involve the operations of building and exchanging passwords, abstract and title), and requests transmitted and received between the communication server and the client. (Chen discloses client server negotiations in the abstract.) Chen discloses all the limitations except for a third storage means for storing data indicating a status of each of the operation.

Komarla discloses a third storage means (P6, line 31, "flash memory" which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5)

The general concept of providing a third storage means is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a third storage means in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Matelan discloses for storing data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding Claim 56:

Chen also discloses the communication server, wherein: the operation request corresponds to a function call; and the operation response corresponds to an execution result of a function called by the function call (It is inherent that Chen's operation request and operation response corresponds to an execution result of a function called by the function call).

Regarding Claim 74

A communication system for a communication client and a communication server ("A system...for communicating...from a client to a server" Abstract, lines 1-2), wherein

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the communication client transmits a communication request to the communication server and receives a communication response to said communication request from the communication server, said communication request describing a client request corresponding to a client operation request to the communication server, said communication response describing a client operation response to said client request (Chen's client and server perform the operation requests and responses of building and exchanging encrypted passwords, abstract and title), the communication system comprising: client transmitting means (a client inherently has transmitting means) for collectively transmitting to the communication server the client request and a server operation response to a server request corresponding to a server operation request from the communication server that are described together in the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and transmit a client request and a server response); client receiving means (a client inherently has receiving means) for collectively receiving from the communication server the client operation response to the client request transmitted to the communication server and the server request that are described together in the communication response to the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a

request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and receive a client request and a server response); and client executing means (Chen discloses a computer in Column 4, line 67, which inherently has executing means) for executing an operation according to the server request and generating the server operation response to the server request as an execution result of said operation (Chen discloses the operations of negotiations between a client and a server of building and exchanging encrypted passwords, abstract, and title, which inherently require execution results); and requests transmitted and received between the communication server and the client (Chen discloses negotiations between the client and the server in the abstract), server receiving means (a server inherently has receiving means) for collectively receiving from the communication client the client request and the server operation response to the server request transmitted to the communication client that are described together in the communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and receive a client request and a server response); server transmitting means (a server inherently has transmitting means) for collectively transmitting to the communication client the client operation response to the client request received from the communication client and the server request that are described together in the communication response to the

communication request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and transmit a client request and a server response); and server executing means (a server is a computer or server software, and Chen discloses a computer in Column 4, line 67 as well as a server in his abstract, which inherently has executing means) for executing an operation according to the client request and generating the client operation response to the client request as an execution result of said operation (Chen discloses the operations of negotiations between a client and a server of building and exchanging encrypted passwords, abstract, and title, which inherently require execution results), and requests transmitted and received between the communication server and the client. (Chen discloses negotiations between the client and the server in the abstract). Chen discloses all the limitations as disclosed above except for a client memory configured to store data indicating a status of each of the operation requests, and a server memory configured to store data indicating a status of each of the operation requests.

Komarla discloses client and server memory. (P31, lines 20-22)

The general concept of providing client and server memory is well known in the art as illustrated by Komarla who discloses client and server memory in a network system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of client and server memory in his advantageous method as taught by Komarla in order to improve networked communications between client and server.

Matelan discloses memory configured to store data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding Claim 75:

The communication system as claimed in claim 74, wherein: the client operation request and the server operation request each correspond to a function call; and the client operation response and the server operation response each correspond to an execution result of a function called by the function call.

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(It is inherent that the request and response describe an execution result of a function call)

10. Claims 11, 19, 29, 34, 51, 57, 71, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of an obvious duplication of parts, and further in view of Matelan and Komarla.

Regarding claims 11, 19, and 29:

Chen discloses a system, medium and communication apparatus that is adapted to communicate with another communication apparatus as a communication counterpart, said communication apparatus, system, and medium, ("A method and system is provided for communicating...from a client to a server" abstract, lines 1-2 and "computer usable medium" Claim 10, line 1, and "a computer useable medium having computer readable program code" Claim 10 lines 2-3.) comprising: first storage means for storing a second operation request from the communication counterpart and a second operation response to said second operation request (Since Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, in Figure 2, which are implemented differently than what is shown, since they are combined Column 3, lines 10-11. When Chen discloses combining a request with a response, it is inherent that the request and response must have been stored in

order to bundle them together in a first storage means); storage means for storing a first operation request to the communication counterpart and a first operation response to said first operation request (Since Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, in Figure 2, which are implemented differently than what is shown, Column 3, lines 10-11, when combining a request with a response, it is inherent that the request and response must have been stored in order to bundle them together before transmitting them); request generating means (both Chen's client and server inherently have request generating means) for generating the first operation request to the communication counterpart and storing the generated first operation request in the storage means (it is inherent that the Chen's operation request must have at least been stored in a buffer storage means); response generating means (both a client and a server have response generating means) for reading from the first storage means the second operation request from the communication counterpart (Since Chen discloses multiple negotiations in Figure 2, which are implemented differently than what is shown, Column 3, lines 10-11, all requests are inherently read by the communicating client and server), executing an operation according to said second operation request (Chen executes the operations of building and exchanging encrypted passwords, abstract and title, with more than one request, Figure 2), generating the second operation response to said second operation request as an execution result of said operation (Chen executes and generates the

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operations of building and exchanging encrypted passwords, abstract and title, with more than one response, Figure 2), and storing in the first storage means the generated second operation response in association with the read second operation request (Since Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, in Figure 2, which are implemented differently than what is shown, Column 3, lines 10-11, when combining a request with a response, it is inherent that the request and response must have been stored at least in a buffer in order to bundle them together and then transmit them); gathering means for reading from the first storage means the second operation response to the second operation request from the communication counterpart (Since Chen discloses multiple negotiations which are exchanged in order to perform the operations of building and exchanging passwords, abstract, Chen discloses the gathering means to read the negotiations which involve requests and responses), and reading from the storage means the first operation request to the communication counterpart (Chen discloses that a first request is read, abstract, and it is inherent that if Chen can combine a request with a response, it must have at least been stored in a buffer); transmitting means for collectively transmitting (Chen's client and server inherently have transmitting means) to the communication counterpart the second operation response and the first operation request read by the gathering means in one batch ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request

with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses that his system, method and medium combines a second operation response and a first operation request); receiving means (both Chen's client and server have receiving means) for collectively receiving from the communication counterpart the first operation response to the first operation request transmitted to the communication counterpart and the second operation request from the communication counterpart in one batch ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses that his system, method and medium combines a first operation response and a second operation request); and distributing means for storing in the first storage means the second operation request from the communication counterpart received by the receiving means (Since Chen discloses that a request and response can be bundled, Column 3, lines 8-11, Chen's client and server both have the distributing means to perform these actions), and storing in the storage means the first operation response to the first operation request transmitted to the communication counterpart in association with the first operation request transmitted to the communication counterpart (Since Chen bundles a request with a response it is inherent that the response must have been stored in a buffer at least) and operation requests transmitted and received between the communication apparatus and the communication counterpart. (abstract, client server negotiations)

Chen discloses all the limitations as disclosed above except for a second storage means and a third storage means for storing data indicating a status of each of the operation..

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations has been disclosed by Chen.

Komarla discloses a third storage means (P6, line 31, "flash memory" which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5)

The general concept of providing a third storage means is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a third storage means in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Matelan discloses for storing data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include for storing data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claims 34 and 51:

Chen discloses a server request in Figure 2, as well as multiple negotiations, which combine a request and response Column 3, lines 8-11, which would require storing the server request. Chen also discloses operation requests transmitted and received between the communication server and the client. (abstract, client server negotiations) Chen discloses all the limitations of claims 34 and 51 except for providing a second storage means and a third storage means for storing data indicating a status of each of the operation.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second

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storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Komarla discloses a third storage means (P6, line 31, "flash memory" which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5)

The general concept of providing a third storage means is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a third storage means in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Matelan discloses for storing data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses storing data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include for storing data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claim 57:

Chen discloses all the limitations of claim 57 including operation requests transmitted and received between the communication server and the client (abstract, client server negotiations) as disclosed except for a second storage means and a third storage means for storing data indicating a status of each of the operation.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Komarla discloses a third storage means (P6, line 31, "flash memory" which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5)

The general concept of providing a third storage means is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a third storage means in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Matelan discloses for storing data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include for storing data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claims 71 and 76:

Chen discloses all the limitations of claim 71 and 76 including operation requests transmitted and received between the communication server and the client (abstract, client server negotiations) except for a second storage means, a third storage means, a client third storage means and server third storage means for storing data indicating a status of each of the operation.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage

means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Komarla discloses a third storage means and client and server third storage. (P6, line 31, "flash memory" which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5; client and server memory P31, lines 20-22)

The general concept of providing a third storage means and client and server third storage is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a third storage means in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Matelan discloses for storing data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of for storing data indicating a status of

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each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

4. Claims 14, 15, 38, 39, 60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Box et al (Simple Object Access Protocol (SOAP) 1.1 page 5), hereinafter referred to as Box, and further in view of and Matelan.

Regarding claim 14:

Chen discloses communication apparatus that is adapted to communicate with another communication apparatus as a communication counterpart, said communication apparatus, medium, and system, ("A method and system is provided for communicating...from a client to a server" abstract, lines 1-2 and "computer usable medium" Claim 10, line 1, and "a computer useable medium having computer readable program code" Claim 10 lines 2-3.) comprising: transmitting means (a client, Column 1, line 67, inherently has transmitting means) for collectively transmitting to the communication counterpart a first request to be transmitted to the communication counterpart and a second response to a second request from the communication counterpart, which first request and second response are described in one message ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses that his system, method and medium can combine a first

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operation request and a second operation response); receiving means (a server inherently has receiving means) for collectively receiving from the communication counterpart a first response to the first request transmitted to the communication counterpart and the second request from the communication counterpart, which first response and second request are described in one message (Chen discloses "receiving from said server an invitation to engage in new environment negotiations" Claim 6, lines 4 and 5, and "receiving from said server a request for a user variable name..." Claim 7, lines 8-9, and Chen discloses a "request that client 110 send the terminal type" as well as the "client 110 and server 100 enter into negotiations for the remaining set of required options..." Column 2, lines 63-67 and Column 3, line 1, and since Chen discloses that a request and a response can be combined together as well as multiple negotiations, he discloses a first operation response and second operation request.); and means for executing an operation being requested by the second request from the communication counterpart ("a computer useable medium having computer readable program code means" Claim 10 lines 2-3, and Chen discloses "step 134 in which server 100 issues the SB Terminal Type send command which is a request, and in Figure 2 it is the second request) and generating the second response describing an execution result of said second request (and "To this, in step 136, client 110 responds with the terminal type" which is the second response, thereby generating it. Also since Chen discloses that he can bundle requests with responses, and because Chen discloses negotiations between the client and the server, Chen discloses a second operation request and a second operation response), and requests transmitted and received

between the communication apparatus and the communication counterpart. (Chen discloses client/server negotiations in the abstract.)

Chen discloses all the limitations as disclosed above except for using SOAP in his requests and responses and a memory configured to store data indicating a status of each of the operation requests.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence.)

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al, which discloses SOAP messages in a request and response. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response system, medium, and apparatus to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Matelan discloses a memory configured to store data indicating a status of each of the operation requests. ("The lock operation status register is used to store the result of every request operation." Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

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It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Regarding claim 15:

Chen discloses the communication apparatus, system, and medium wherein: the first request and the second request each describe a function call; the first response and the second response each describe an execution result of a function called by the function call. ("Also it is permissible and common practice to bundle more than one response or request, or combine a request with a response..." Column 3, lines 8-11. It is inherent that these operations correspond to a function call and the execution result of a function call).

Chen discloses all the limitations as disclosed above except for using SOAP in his requests and responses.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence.)

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al, which discloses SOAP messages in a request and response.

It would have been obvious for one of ordinary skill in the art at the time of the

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invention to modify Chen of his request and response system, medium, and apparatus to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Regarding claim 38:

Chen discloses a communication client that is adapted to transmit an request to a communication server. (it is inherent that a client can transmit a request to a server), and receive an response to said request from the communication server (it is inherent that a client can receive a response from a server), wherein the request describes a client request to the communication server (a client inherently makes a client request to a server), and the response describes a client response to the client request (Chen discloses client responses in Column 3, line18, the "negative acknowledgement"), said communication client comprising: transmitting means (a client and a server inherently have transmitting means) for collectively transmitting to the communication server the client request and a server response to a server request from the communication server that are described together in the request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses that his system, method and medium can combine a client request and a server response); receiving means for collectively receiving (a client and a server inherently have

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receiving means) from the communication server the client response to the client request transmitted to the communication server and the server request from the communication server that are described together in the response ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations, Chen discloses that his system, method and medium can combine a client response and a server request); and means for executing (Chen discloses a computer in Column 4, line 67, which inherently has executing means) an operation according to the server request received from the communication server and generating an execution result of said operation that is to be described in the server response to said server request (Chen discloses the operations of negotiations between a client and a server of building and exchanging encrypted passwords, abstract, and title, which inherently require execution results) and operation requests transmitted and received between the communication server and the client.

Chen discloses all the limitations as disclosed above except for using SOAP and HTTP in his requests and responses and a memory configured to store data indicating a status of each of the operation requests.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also teaches "how to use SOAP in combination with HTTP and HTTP Extension framework", Abstract, page 1, last two lines.)

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response system, medium, and apparatus, and client/server method and system to include the use of SOAP and HTTP messages in his advantageous method as taught by Box in order to combine messages to “implement patterns such as request/response”, as stated by Box on page 5, paragraph 3, last line.

Similar arguments to claim 14 apply to claim 38.

Regarding claim 39:

Chen also discloses the communication client, wherein: the client request and the server request each describe a function call; the client response and the server response each describe an execution result of a function called by the function call. (“Also it is permissible and common practice to bundle more than one response or request, or combine a request with a response...” Column 3, lines 8-11. It is inherent that these operations correspond to a function call and the execution result of a function call).

Chen discloses all the limitations as disclosed above except for using SOAP in his requests and responses.

Box teaches the use of SOAP in requests and responses. (“SOAP messages are often combined to implement patterns such as request/response”, page 5, paragraph 3,

last sentence.)

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al, which discloses SOAP messages in a request and response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response system, medium, and apparatus to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Regarding Claim 60:

Chen discloses a communication server that is adapted to receive an request from a communication client (a server can inherently receive a request from a client), and transmit an response to said communication request to the communication client (a server inherently transmits responses to a client), wherein the request describes a request from the communication client, and the response describes a response to said request (This is inherent in client server operations), said communication server comprising: receiving means (a server inherently has receiving means and so does a client) for collectively receiving from the communication client the request and a response to a request transmitted to the communication client that are described together in the request (Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response...

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Column 3, lines 8-11); transmitting means (a server inherently has receiving means and so does a client) for collectively transmitting to the communication client the response to the request from the communication client and the request to the communication client that are described together in the response to the request (Chen discloses "Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11); and means for executing (Chen discloses a computer in Column 4, line 67, which inherently has executing means) an operation according to the request received from the communication client and generating an execution result of said operation that is to be described in the response to said request, (Chen discloses a computer in Column 4, line 67, which inherently has executing means) and operation requests transmitted and received between the communication server and the client (abstract, client server negotiations)

Chen discloses all the limitations as disclosed above except for using SOAP and HTTP in his requests and responses and a memory configured to store data indicating a status of each of the operation requests.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also teaches "how to use SOAP in combination with HTTP and HTTP Extension framework", Abstract, page 1, last two lines.)

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Similar arguments from claims 14 and 38 apply to claim 60.

Regarding Claim 61:

Chen discloses the communication server, wherein: the request describes a function call; and the response describes an execution result of a function called by the function call. (It is inherent that the request and response describe an execution result of a function call)

Chen discloses all the limitations as disclosed above except for using SOAP in his requests and responses.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also discloses "method calls" which are function calls using SOAP which produce execution results.

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method

to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

11. Claims 58, 72, 78, 80, 81, 82, 16, 36, 53, 40, 62, and 12, 20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, Matelan, and Komarla as applied to claims 57, 71, 76, 80, 34, 51, 11, 19, and 29, and further in view of Box (Simple Object Access Protocol (SOAP) 1.1 page 5).

Regarding claim 58:

Chen discloses all the limitations as disclosed except for using SOAP messages and using a second storage means.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence.)

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al, which discloses SOAP messages in a request and response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response system, medium, and apparatus to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as

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stated by Box on page 5, paragraph 3, last line.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Regarding claims 72 and 78:

Chen discloses all the limitations as disclosed above except for a second storage means and using SOAP messages.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence.

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Regarding claims 12, 20 and 30.

Chen discloses all the limitations as disclosed in claims 12, 20 and 30 except for using SOAP in his messages.

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Regarding Claim 80:

Chen discloses a communication system for a communication client and a communication server ("A system...for communicating...from a client to a server" Abstract, lines 1-2), wherein the communication client transmits an request to the communication server and receives an response to the request from the communication server (Chen discloses "negotiations" Column 3, line 12, between a client and a server,

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which involve requests and responses), said request describing a client request to the communication server (Chen discloses "negotiations" Column 3, line 12, between a client and a server, which involve requests and responses), said response describing a client response to said client request server (Chen discloses "negotiations" Column 3, line 12, between a client and a server, which involve requests and responses), said communication system comprising: client transmitting means (a client inherently has transmitting means) for collectively transmitting to the communication server the client request to the communication server and a server response to a server request from the communication server that are described together in the request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and transmit a client request and a server response); client receiving means (a client inherently has receiving means) for collectively receiving from the communication server the client response to the client request transmitted to the communication server and the server request from the communication server that are described together in the response to the request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and receive a client request and a server response); and client executing

means (Chen discloses a computer in Column 4, line 67, which inherently has executing means) for executing an operation according to the server request received from the communication server and generating an execution result of said operation that is to be described in the server response to said server request (Since the server "validates" the encrypted user password in negotiations between the client and the server, abstract, Chen discloses that he executes the operation and generates the an execution result); server receiving means (a server inherently has receiving means) for collectively receiving from the communication client the client request from the communication client and the server response to the server request transmitted to the communication client that are described together in the request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can combine and receive a client request and a server response); server transmitting means (a server inherently has transmitting means) for collectively transmitting to the communication client the client response to the client request from the communication client and the server request to the communication client that are described together in the response to the request ("Also, it is permissible and common practice to bundle more than one response or request, or combine a request with a response... Column 3, lines 8-11. In addition to disclosing the combining of a request with a response, because Chen discloses multiple negotiations in Figure 2, Chen discloses that his system, method and medium can

combine and receive a client response and a server request); and server executing means (a server which is a computer inherently has executing means) for executing an operation according to the client request received from the communication client and generating an execution result of said operation that is to be described in the client response to said client request (Chen discloses the operations of negotiations between a client and a server of building and exchanging encrypted passwords, abstract, and title, which inherently require execution results) and operation requests transmitted and received between the communication server and the client (abstract, client server negotiations).

Chen discloses all the limitations as disclosed above except for using SOAP and HTTP in his requests and responses and a client and server memory configured to store data indicating a status of each of the operation requests.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also teaches "how to use SOAP in combination with HTTP and HTTP Extension framework", Abstract, page 1, last two lines.)

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP and HTTP messages in his advantageous method as taught

by Box in order to combine messages to “implement patterns such as request/response”, as stated by Box on page 5, paragraph 3, last line.

Matelan discloses a memory configured to store data indicating a status of each of the operation requests. (“The lock operation status register is used to store the result of every request operation.” Col 41, lines 17-20).

The general concept of providing a memory configured to store data indicating a status of each of the operation requests is well known in the art as illustrated by Matelan who discloses a memory configured to store data indicating a status of each of the operation requests.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a memory configured to store data indicating a status of each of the operation requests in his advantageous method as taught by Matelan in order to provide status for network communications.

Komarla discloses client and server memory. (P6, line 31, “flash memory” which is rewriteable memory as the third memory, and other memories are disclosed P6, line 30 through P7, lines 1-5; client and server memory P31, lines 20-22)

The general concept of providing a client and server memory is well known in the art as illustrated by Komarla who discloses multiple storage means in a network.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen to include the use of a client and server memory in his advantageous method as taught by Komarla in order to provide storage for improved networked communications.

Regarding Claim 81:

The communication system as claimed in claim 80, wherein: the client request and the server request each describe a function call; the client response and the server response each describe an execution result of a function called by the function call. (It is inherent that the request and response describe an execution result of a function call).

Chen discloses all the limitations as disclosed above except for using SOAP and HTTP in his requests and responses.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also teaches "how to use SOAP in combination with HTTP and HTTP Extension framework", Abstract, page 1, last two lines. Box also discloses "method calls" which are function calls using SOAP which produce execution results).

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP and HTTP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as

request/response", as stated by Box on page 5, paragraph 3, last line.

Regarding claim 82:

Chen discloses all the limitations as disclosed above except for using SOAP and HTTP in his requests and responses and a second storage means.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also teaches "how to use SOAP in combination with HTTP and HTTP Extension framework", Abstract, page 1, last two lines.)

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Regarding claim 16:

Chen discloses all the limitations of claim 16 including operation requests transmitted and received between the communication apparatus and the communication counterpart, except for a second storage means and using SOAP in his request/response apparatus and a third storage means for storing data indicating a status of each of the operation requests.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations has been disclosed by Chen.

Box teaches the use of SOAP in requests and responses. ("SOAP messages are often combined to implement patterns such as request/response", page 5, paragraph 3, last sentence. Box also discloses "method calls" which are function calls using SOAP which produce execution results.

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in

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order to combine messages to “implement patterns such as request/response”, as stated by Box on page 5, paragraph 3, last line.

Similar arguments to claim 11 apply to claim 16.

Regarding claims 36 and 53:

Chen discloses all the limitations of claims 36 and 53 except for using SOAP in his request/response client and medium and providing a second storage.

Box teaches the use of SOAP in requests and responses. (“SOAP messages are often combined to implement patterns such as request/response”, page 5, paragraph 3, last sentence. Box also discloses “method calls” which are function calls using SOAP which produce execution results.

The general concept of using SOAP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP messages in his advantageous method as taught by Box in order to combine messages to “implement patterns such as request/response”, as stated by Box on page 5, paragraph 3, last line

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second

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storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Regarding claim 40:

Chen discloses all the limitations including operation requests transmitted and received between the communication server and the client (abstract), except for a second storage means and using SOAP and HTTP and a third storage means for storing data indicating a status of each of the operation requests.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP and HTTP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Similar arguments to claim 16 apply to claim 40.

Regarding claim 62:

Chen discloses all the limitations including operation requests transmitted and received between the communication server and the client (abstract), except for a second storage means and using HTTP and SOAP and a third storage means for storing data indicating a status of each of the operation requests.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of using SOAP and HTTP messages in requests and responses is well known in the art as illustrated by Box et al which discloses using SOAP and HTTP messages in a request and a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response client/server system and method to include the use of SOAP and HTTP messages in his advantageous method as taught by Box in order to combine messages to "implement patterns such as request/response", as stated by Box on page 5, paragraph 3, last line.

Similar arguments to claim 16 and 40 apply to claim 62.

12. Claims 13, 21, 31, 59, 37, 54, 73, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, Matelan, and Komarla as applied to claims 11, 19, 29,

57, 34, 51, 71, and 76, and further in view of Aman et al (US patent number 6249800, dated June 19, 2001) hereinafter referred to as Aman, and Gase, (US patent number 6184996, dated February 6, 2001.)

Regarding claims 13, 21, and 31:

Chen discloses all the limitations except for assigning priority information to requests and responses and reading them successively.

Aman teaches assigning priorities to requests and successively reads the requests. (Column 2, lines 63-66)

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art prior to the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to "enable remote control...of a..queue...over the Internet..

Abstract, lines 1-3.

Regarding claim 59:

Chen discloses all the limitations as disclosed except for assigning priority information and a second storage means.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art prior to the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in

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his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to "enable remote control...of a ..queue...over the Internet..

Abstract, lines 1-3.

Regarding claims 37 and 54:

Chen discloses all the limitations as disclosed except for the second storage means and priority information.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second

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storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to "enable remote control...of a ..queue...over the Internet..

Abstract, lines 1-3.

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Regarding claims 73 and 79:

Chen discloses all the limitations as disclosed in claim 73 except for a second storage means and assigning priority information.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to "enable remote control...of a ..queue...over the Internet.. Abstract, lines 1-3.

13. Claims 35, 52, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, Matelan, and Komarla, as applied to claims 34, 51, and 76, and further in view of Narin (US publication 2002/0091755, dated July 11, 2002, and filed on January 5, 2001)

Regarding claims 35 and 52:

Chen discloses all the limitations of claims 35 and 52 except for wherein the transmitting means is arranged to periodically transmit the communication request to the communication server.

Narin teaches periodically transmitting an HTTP request to the server.
(page 6 of the specification, paragraph 0067, last two lines.)

The general concept of periodically transmitting a request to a server is well known in the art as illustrated by Narin, which discloses periodically transmitting a request in a request servicing system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his advantageous request/response system to include the

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use of periodically transmitting a request in his advantageous method as taught by Narin in order to generate and service requests as stated by Narin in his abstract, lines 1-2.

Regarding claim 77:

Chen discloses all the limitations of claim 77 except for the second storage means and periodically transmitting a request to a server.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Narin teaches periodically transmitting an HTTP request to the server.

(page 6 of the specification, paragraph 0067, last two lines.)

The general concept of periodically transmitting a request to a server is well known in the art as illustrated by Narin, which discloses periodically transmitting a request in a request servicing system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his advantageous request/response system to include the use of periodically transmitting a request in his advantageous method as taught by Narin in order to generate and service requests as stated by Narin in his abstract, lines 1-2.

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14. Claims 41 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, Matelan, and Komarla as applied to claims 40 and 80 and further in view of Box as applied to claim 40, and Narin.

Regarding claim 41:

Chen and Box disclose all the limitations of claim 41 except for periodically transmitting a request to a server.

Narin teaches periodically transmitting an HTTP request to the server. (page 6 of the specification, paragraph 0067, last two lines.)

The general concept of periodically transmitting a request to a server is well known in the art as illustrated by Narin, which discloses periodically transmitting a request in a request servicing system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his advantageous request/response system to include the use of periodically transmitting a request in his advantageous method as taught by Narin in order to generate and service requests as stated by Narin in his abstract, lines 1-2.

Regarding claim 83:

Chen and Box disclose all the limitations of claim 83 except for the second storage means and periodically transmitting an HTTP request.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

Narin teaches periodically transmitting an HTTP request to the server. (page 6 of the specification, paragraph 0067, last two lines.)

The general concept of periodically transmitting a request to a server is well known in the art as illustrated by Narin, which discloses periodically transmitting a request in a request servicing system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his advantageous request/response system to include the use of periodically transmitting a request in his advantageous method as taught by Narin in order to generate and service requests as stated by Narin in his abstract, lines 1-2.

15. Claims 42, 63, 84, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, Matelan, and Komarla, as applied to claims 40, 62, 80, and 16, and further in view of Box, Aman and Gase.

Regarding claim 42:

Chen and Box disclose all the limitations of claim 42 except for assigning priorities to requests and responses, and providing a second storage means.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as

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taught by Gase in order to "enable remote control...of a ..queue...over the Internet..

Abstract, lines 1-3.

Regarding claim 63:

Chen and Box disclose all the limitations as disclosed except for a second storage, and assigning priorities to requests and responses.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least

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one queue alteration value” after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to “enable remote control...of a ..queue...over the Internet..

Abstract, lines 1-3.

Regarding claims 84 and 91:

Chen and Box disclose all the limitations of claims 84 and 91 except for a second storage means and assigning priority information.

The general concept of providing a second storage means falls within the realm of common knowledge as obvious duplication of parts.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the request/response system of Chen to include the use of a second storage means in his advantageous system in order to improve performance of the system since multiple response and request negotiations have been disclosed by Chen.

The general concept of assigning priorities to requests and successively reading them is well known in the art as illustrated by Aman, which discloses assigning priorities to requests in a request system.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system and medium to include the use of assigning priorities to requests and successively reading them in his advantageous method as taught by Aman in order to assign "priority for each one of these requests" so that the requests can be executed in a particular order as stated by Aman in Column 2, lines 63-66.

Gase teaches assigning priorities to responses in a print queue. (Column 2, lines 41-42 discloses "receiving a response message from the client processor with at least one queue alteration value" after which they will be read successively in order to establish priorities of responses.

The general concept of assigning priorities to responses is well known in the art as illustrated by Gase, which discloses assigning priority in a response.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Chen of his request and response method, system, and medium to include the use of assigning priorities to responses in his advantageous method as taught by Gase in order to "enable remote control...of a ..queue...over the Internet.. Abstract, lines 1-3.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joan B. Naurot Ton whose telephone number is 571-270-1595. The examiner can normally be reached on M-Th 9 to 6:30 (flex sched) and alt Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JBNT
11/19/2007


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SUPERVISORY PATENT EXAMINER